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Formative Feedback, Writing Self-Efficacy, and Perceived Writing Competence Among EFL University Students in Kosovo: An Associative Cross-Sectional Study

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ABSTRACT

Background. Research on EFL writing has widely examined formative feedback and writing self-efficacy, but fewer studies have integrated feedback quality, task-specific writing self-efficacy, and perceived writing competence within a single empirical model. The unresolved problem is whether students' confidence in performing academic writing tasks functions as an intermediary mechanism through which feedback perceptions are associated with competence self-evaluations, particularly in underrepresented higher education contexts where formative assessment practices are still developing.

Purpose. This study clarifies whether writing self-efficacy operates as a linking construct between formative feedback and perceived writing competence among EFL university students in Kosovo. In doing so, it aims to extend social-cognitive explanations of academic writing by showing how an instructional condition may be connected to students' self-evaluative judgments through writing-related capability beliefs.

Method. Self-report data were collected from 400 students enrolled in English-medium academic writing courses at four higher education institutions in Kosovo. The measurement model was examined through confirmatory factor analysis, and the hypothesized relationships were tested through observed-variable path analysis. Because the study was cross-sectional and based on self-report data, all findings are interpreted as associative rather than causal.

Results. The hypothesized pattern was supported. Formative feedback was positively associated with writing self-efficacy ($\beta = 0.39$) and perceived writing competence ($\beta = 0.30$), while writing self-efficacy was positively associated with perceived writing competence ($\beta = 0.37$). The indirect association through writing self-efficacy was significant ($\beta = 0.15$), indicating partial statistical mediation. Substantively, students who perceived feedback as clearer and more usable also tended to report stronger writing confidence, which in turn was linked to more positive competence evaluations.

Conclusion. The study contributes by testing an integrated model of feedback, self-efficacy, and perceived writing competence in an underrepresented Balkan EFL higher education context. It positions writing self-efficacy as an intermediary construct that helps explain why formative feedback is associated with students' competence self-evaluations. The findings support the broader applicability of Social Cognitive Theory to EFL writing while also highlighting the need for cross-cultural research that compares how feedback traditions and student engagement shape this model across educational systems.

KEYWORDS

formative feedback; writing self-efficacy; perceived writing competence; EFL writing; Kosovo higher education; academic writing; statistical mediation

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INTRODUCTION

Academic writing is a central requirement of higher education and is particularly demanding for students learning English as a Foreign Language (EFL), who must develop disciplinary expression while also managing the linguistic, rhetorical, and organizational demands of writing in a non-native language. Research on second-language writing shows that feedback is central not only to correction but also to students' understanding of audience, disciplinary expectations, and revision choices (Hyland & Hyland, 2006). In formative assessment theory, feedback is most useful when it clarifies learning goals, identifies the gap between current and desired performance, and provides information that learners can use while learning is still in progress (Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006). For this reason, formative feedback is commonly treated as an instructional resource that helps students identify strengths and weaknesses, understand expected standards, and revise writing before final evaluation (Carless, 2006).

However, previous research also cautions that feedback does not automatically produce improvement. Carless (2006) argues that students and teachers may interpret feedback differently, while Nicol and Macfarlane-Dick (2006) emphasize that effective feedback requires learners to understand, monitor, and regulate their own performance. This point is especially relevant in writing because students' responses to feedback are shaped not only by instructional input but also by learner beliefs. Social Cognitive Theory conceptualizes self-efficacy as learners' beliefs about their capability to organize and perform the actions required for successful task completion (Bandura, 1997). In writing contexts, students with stronger writing self-efficacy are more likely to persist, revise, manage difficulty, and engage productively with writing tasks and feedback (Zimmerman & Bandura, 1994; Pajares, 2003). Therefore, formative feedback may be connected to students' writing development not only by supplying information about texts but also by shaping how capable students feel of using that information.

The precise research gap addressed in this study arises from the fact that earlier studies have often examined feedback, self-efficacy, and writing-related outcomes as separate lines of inquiry. Feedback research has clarified the characteristics of useful feedback and its role in self-regulated learning (Black & Wiliam, 1998; Hattie & Timperley, 2007), whereas writing self-efficacy research has shown that confidence in writing tasks is related to motivation, effort, persistence, and achievement (Pajares, 2007; Bruning et al., 2013). Recent EFL studies have also linked feedback practices with writing performance, self-efficacy, motivation, and engagement with written corrective feedback (Cui et al., 2021; Tsao, 2021; Siekmann et al., 2023). Nevertheless, fewer studies have integrated perceived feedback quality, task-specific writing self-efficacy, and perceived writing competence within one empirical model. The unresolved issue is therefore not sim-

ply whether feedback and self-efficacy matter, but whether writing self-efficacy helps explain the link between perceived feedback quality and competence self-evaluations.

This gap also has contextual significance. Previous scholarship indicates that feedback practices and students' responses to feedback are shaped by institutional, cultural, and instructional contexts (Bandura, 2002; Lee, 2009). Hyland and Hyland (2006) also show that second-language writing feedback carries interpersonal and motivational meanings, while recent research suggests that feedback experiences may relate differently to self-efficacy, anxiety, and enjoyment across learning environments (Vattøy & Gamlem, 2024). Kosovo remains an underrepresented EFL higher education context in international writing research. English is increasingly important for academic mobility and professional development, yet formative assessment practices may still be unevenly implemented across institutions and courses. Students may therefore experience feedback in different ways: as corrective comments on finished texts, as guidance for revision, or as developmental support for future writing. These contextual conditions make Kosovo a meaningful setting in which to examine whether relationships proposed in social-cognitive writing research are observable in a Balkan EFL environment where feedback practices are still developing.

The present study responds to this conceptual and contextual gap by examining associations among formative feedback, writing self-efficacy, and perceived writing competence among EFL university students in Kosovo. The model is grounded in Social Cognitive Theory, which explains learning through reciprocal relations among environmental conditions, personal beliefs, and behavior (Bandura, 1986, 1997). Within this framework, formative feedback represents an instructional condition, writing self-efficacy represents a task-specific capability belief, and perceived writing competence represents students' self-evaluative judgment of their writing development. Because the study uses cross-sectional self-report data, it does not claim causal effects. Instead, it tests whether the observed data are consistent with a theoretically specified associative model, an approach that is appropriate when path directions are theoretically justified but temporal precedence cannot be empirically established (Kline, 2023).

Accordingly, and in line with prior feedback and self-efficacy research in writing and EFL learning (Nicol & Macfarlane-Dick, 2006; Pajares, 2007; Cui et al., 2021), the study is guided by the following research questions:

- RQ1:** How are students' perceptions of formative feedback associated with perceived writing competence among EFL university students in Kosovo?
- RQ2:** How is writing self-efficacy associated with perceived writing competence in academic writing contexts?

RQ3: Is the association between formative feedback and perceived writing competence in a cross-sectional model consistent with an indirect association via writing self-efficacy?

LITERATURE REVIEW

Integrating Feedback, Self-Efficacy, and Writing Competence Research

The literature on formative feedback, writing self-efficacy, and perceived writing competence can be synthesized around a common analytical problem: how instructional information becomes meaningful for students as they judge and develop their own writing. Feedback research emphasizes that useful feedback should clarify learning goals, identify the gap between current and desired performance, and provide information that students can use in later work (Black & William, 1998; Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006). Writing self-efficacy research, in contrast, shows that students' confidence in performing writing tasks affects persistence, revision, and engagement with writing challenges (Pajares, 2003; Zimmerman & Bandura, 1994). Research on perceived competence further suggests that students' judgments of their own performance are shaped by both instructional experiences and self-beliefs (Bong & Skaalvik, 2003; Bruning et al., 2013).

These strands converge on the idea that feedback, self-efficacy, and competence perceptions should not be treated as isolated constructs. Feedback may provide the informational basis for improvement, but writing self-efficacy may influence whether students feel capable of acting on that information. Perceived writing competence, in turn, may reflect students' evaluation of their developing writing ability after experiencing feedback and judging their own capacity to revise. The present study therefore uses the literature not only to define the constructs, but also to justify their ordering in an integrated model: formative feedback as an instructional condition, writing self-efficacy as a capability belief, and perceived writing competence as a self-evaluative outcome.

This synthesis directly supports the model tested in the present study. If feedback is perceived as clear and usable, students may develop stronger beliefs that they can improve their writing; if they feel more capable, they may also evaluate their writing competence more positively. The literature therefore justifies examining writing self-efficacy as a linking construct rather than simply as an additional predictor.

Formative Feedback as a Source of Writing Self-Efficacy

Formative feedback is central to academic writing because it helps students understand standards, identify weaknesses,

and revise texts before learning has ended (Carless, 2006; Nicol & Macfarlane-Dick, 2006). In EFL writing, feedback is especially consequential because students must coordinate language accuracy, organization, argumentation, and revision while working in a foreign language. Hyland and Hyland (2006) note that feedback on second-language writing is not merely corrective; it also has interpersonal and motivational dimensions. Similarly, Lee (2009) shows that mismatches between teachers' beliefs and feedback practices can limit the usefulness of written feedback for learners. These findings suggest that feedback quality should be examined not only in relation to writing products but also in relation to students' beliefs about their ability to improve.

Social Cognitive Theory provides a mechanism for this link. Bandura (1997) identifies mastery experiences, verbal persuasion, and interpretations of task difficulty as important sources of self-efficacy. In writing courses, formative feedback can activate these sources in several ways. First, feedback that clarifies standards can reduce uncertainty and help students understand what successful writing requires. Second, actionable comments can turn revision into a mastery-oriented experience because students can apply feedback and observe improvement. Third, constructive feedback can function as verbal persuasion by communicating that improvement is possible when students engage with specific revision strategies. Fourth, timely feedback can support self-regulation by allowing students to adjust their writing before final evaluation.

Empirical studies support this theoretical connection. Cui et al. (2021) found that feedback was associated with writing performance, writing self-efficacy, and motivation in EFL writing. Siekmann et al. (2023) similarly linked students' perceptions of teacher feedback with affective-motivational variables in EFL writing. Vattøy and Gamlem (2024) also showed that peer feedback practices were related to self-efficacy and emotional responses in learning. Taken together, these studies suggest that feedback may influence students not only cognitively but also motivationally. For the present study, this literature justifies the first path in the model: students' perceptions of formative feedback quality are expected to be positively associated with writing self-efficacy.

Writing Self-Efficacy and Perceived Writing Competence

Writing self-efficacy refers to students' beliefs about their ability to perform specific writing tasks, such as organizing ideas, using appropriate grammar, revising drafts, and producing texts that meet academic expectations (Pajares, 2003; Pajares & Valiante, 2006). It is a task-specific belief about capability rather than a general sense of confidence. In writing research, self-efficacy has been linked to effort, persistence, self-regulation, and writing achievement (Zimmerman & Bandura, 1994; Pajares, 2007). In EFL contexts, this construct is particularly relevant because students may

face additional linguistic uncertainty and may need stronger beliefs in their ability to manage complex writing demands.

Perceived writing competence is conceptually related to writing self-efficacy, but it is not identical. The distinction follows the broader differentiation between self-efficacy and self-concept or competence judgments (Bong & Skaalvik, 2003; Pajares & Schunk, 2001). Writing self-efficacy is forward-looking and task-oriented: it concerns whether students believe they can perform writing actions successfully. Perceived writing competence is more evaluative and retrospective or ongoing: it concerns how students judge the quality, adequacy, or development of their writing. This distinction is essential in the present study because both constructs are self-reported and may appear close. Treating them separately avoids reducing confidence in future performance to satisfaction with past or current writing quality.

The literature supports positioning writing self-efficacy before perceived writing competence in the model. Students who believe they can organize ideas, revise effectively, and meet academic writing expectations may be more likely to interpret their writing development positively. Bruning et al. (2013) conceptualize writing self-efficacy as multidimensional and closely related to students' writing development. Tsao (2021) further shows that EFL learners' writing self-efficacy is connected to engagement with written corrective feedback, while Hwang (2025) links feedback perception, writing self-efficacy, and self-regulated writing ability. These studies indicate that self-efficacy can shape how students engage with writing and evaluate their progress.

This evidence supports the second and third parts of the present model. Writing self-efficacy is expected to be positively associated with perceived writing competence because students' beliefs about capability are likely to inform their self-evaluations. In addition, self-efficacy is positioned as an intermediary construct because it offers a theoretically grounded mechanism through which feedback perceptions may be linked to competence judgments.

Why Self-Efficacy as an Intermediary Construct

Several constructs could plausibly mediate the relationship between feedback and writing-related outcomes, including feedback literacy, self-regulated learning strategies, motivation, and prior achievement. The present study focuses on writing self-efficacy because Social Cognitive Theory gives it a central role in explaining how environmental conditions are translated into learner behavior and self-evaluation (Bandura, 1997; Schunk & DiBenedetto, 2016). Feedback may tell students what to change, but self-efficacy concerns whether students believe they can make those changes. This makes self-efficacy especially suitable for explaining how feedback becomes psychologically usable in writing development.

The intermediary role of self-efficacy is also consistent with formative feedback theory. Nicol and Macfarlane-Dick (2006) argue that good feedback supports self-regulated learning by helping students understand standards and monitor progress. However, monitoring and revision require students to believe that improvement is possible. If feedback is perceived as understandable but students lack confidence in their ability to apply it, the feedback may not translate into positive competence judgments. Conversely, when feedback strengthens students' sense of capability, it may contribute to more positive evaluations of writing development.

Accordingly, the present study does not treat writing self-efficacy as a general motivational addition to the model. It treats it as the construct most directly connected to the theoretical pathway from feedback to competence self-evaluation. This argument strengthens the logic of the hypothesized indirect association via writing self-efficacy.

Contextual Gap: Kosovo EFL Higher Education

The contextual gap concerns how the relationships among formative feedback, writing self-efficacy, and perceived writing competence operate in Kosovo's EFL higher education environment. Much EFL writing research has been conducted in Western, East Asian, or other comparatively well-studied educational systems. These contexts provide valuable evidence, but they may differ in feedback traditions, writing pedagogy, assessment cultures, and students' prior experience with revision-based learning.

Kosovo provides a meaningful setting because English is increasingly important for academic advancement, mobility, and employment, while formative assessment practices may still be developing across institutions. In such contexts, students may be accustomed to feedback as correction or evaluation rather than as a dialogic and developmental process. This may affect how feedback is interpreted, whether it supports confidence, and whether students use it to evaluate their writing competence. Therefore, examining the proposed model in Kosovo is not only a matter of filling a geographical gap; it also allows the study to explore whether a social-cognitive feedback model is observable in a post-transition Balkan EFL context where feedback practices and student engagement may vary.

This contextual argument leads directly to the present study. By testing the integrated model in Kosovo, the study examines whether relationships established or implied in broader EFL writing research are also evident in an underrepresented higher education context. At the same time, the study remains cautious: because the data are cross-sectional and self-reported, the findings are interpreted as associative and as a basis for future comparative research rather than as evidence of universal causal processes.

THEORETICAL FRAMEWORK AND RESEARCH MODEL

The proposed model is grounded in Social Cognitive Theory, which explains learning through reciprocal relations among environmental conditions, personal beliefs, and behavior (Bandura, 1986, 1997). In the present study, formative feedback represents an environmental or instructional condition, writing self-efficacy represents a personal belief about capability, and perceived writing competence represents a self-evaluative outcome. The model therefore translates Social Cognitive Theory into an EFL writing framework by asking whether students' perceptions of feedback are associated with their confidence as writers and whether this confidence is associated with how they evaluate their writing competence.

The pathway from formative feedback to writing self-efficacy is theoretically specified through Bandura's sources of self-efficacy. Feedback can support mastery experiences when students use comments to revise drafts and observe improvement. It can function as verbal persuasion when comments communicate that progress is possible and identify concrete strategies for improvement. It can reduce uncertainty by clarifying expectations, assessment criteria, and performance standards. It can also support self-regulation by helping students monitor the gap between current and desired writing performance. These mechanisms explain why formative feedback is expected to be positively associated with writing self-efficacy rather than merely with perceived competence.

Writing self-efficacy is positioned as an intermediary construct because it is the learner belief most directly concerned with perceived capability to act on feedback. Alternative constructs such as feedback literacy, motivation, or self-regulated learning strategies are also relevant and may explain additional parts of the feedback-writing relationship. However, self-efficacy is central in Social Cognitive Theory because it influences how learners interpret challenges, choose strategies, persist through difficulty, and evaluate their progress (Schunk, 1991; Schunk & DiBenedetto, 2016). In academic writing, feedback may provide the information needed for improvement, but self-efficacy concerns whether students believe they can use that information to perform writing tasks successfully.

The model also depends on a clear distinction between writing self-efficacy and perceived writing competence. Writing self-efficacy is forward-looking and task-specific: it concerns students' beliefs about their capability to perform writing actions such as organizing ideas, revising drafts, and meeting academic standards. Perceived writing competence is evaluative and refers to students' judgment of the quality or development of their writing. Although both constructs involve self-perception, they perform different functions in the

model. Self-efficacy is placed before perceived competence because capability beliefs may shape how students interpret their writing progress and evaluate their own performance.

The model is directional for theoretical reasons but not causal in the empirical sense. The authors acknowledge that feedback, self-efficacy, and perceived competence may be reciprocal over time. Students who feel competent may seek or use feedback differently, and successful writing experiences may strengthen self-efficacy. A cross-sectional design cannot test these dynamic reciprocal processes. Nevertheless, testing the proposed associative model is useful because it examines whether the data are consistent with a theoretically grounded ordering that can be evaluated more rigorously in future longitudinal or experimental research.

Each hypothesis is derived from this theoretical logic. Because formative feedback can provide mastery-oriented guidance, verbal persuasion, and clarified standards, it is expected to be positively associated with writing self-efficacy. Because self-efficacy concerns students' perceived capability to complete writing tasks, it is expected to be positively associated with perceived writing competence. Finally, because feedback may become meaningful partly through students' confidence in using it, writing self-efficacy is expected to statistically link formative feedback and perceived writing competence.

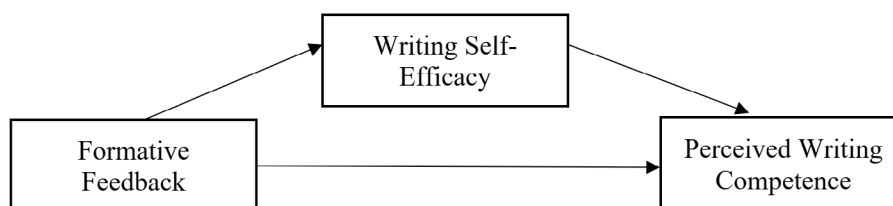
On this basis, the following hypotheses are proposed:

- H1:** Students' perceptions of formative feedback quality are positively associated with writing self-efficacy among EFL university students in Kosovo.
- H2:** Writing self-efficacy is positively associated with perceived writing competence among EFL university students in Kosovo.
- H3:** The association between formative feedback and perceived writing competence will be consistent with an indirect association via writing self-efficacy, reflecting a statistical mediation pattern at the associative level in a cross-sectional model.

METHOD

Sample and Data Collection

The study targeted university students enrolled in higher education institutions in Kosovo. A convenience sampling approach was employed, with the survey administered online via Google Forms and distributed through student email lists, university social media groups, and in-person invitations. Participation was voluntary, and respondents were informed about the purpose of the study, assured of anonymity, and encouraged to answer honestly. A total of 400 students completed the survey. This sample size exceeds conventional recommendations for path analysis (minimum

Figure 1*Hypothesized Association Model*

Note. Boxes represent constructs; arrows represent hypothesized directional associations. The indirect path via Writing Self-Efficacy (H3) is distinct from the direct path between Formative Feedback and Perceived Writing Competence.

200; Kline, 2023) and provides adequate statistical power for detecting medium effect sizes (Cohen, 1988).

Participants were drawn from five academic programs - Education, Economics, Computer Science, Law, and Philology - across four higher education institutions in Kosovo. Table 1 shows that the sample was primarily undergraduate (84.3%) and included more female (58.0%) than male students (42.0%). Institutionally, students were distributed across UPZ (37.3%), UP (30.3%), AAB (19.8%), and UBT (12.8%), which provided a multi-institutional basis for examining the model within Kosovo higher education. Recruitment procedures were broadly consistent across institutions and involved official student communication channels and course instructors in academic writing courses.

All participants were required to be currently enrolled in an English-medium academic writing course. These courses were designed to develop core university-level writing skills, including idea organization, paragraph and essay structure, argumentation, revision, and language accuracy. Although students came from different academic programs, the courses were comparable in their emphasis on academic writing in English and shared broadly similar learning objectives, assignment types, and feedback practices. This common instructional context provided a consistent basis for examining students' perceptions of formative feedback, writing self-efficacy, and perceived writing competence.

It is important to note that the sample was not drawn using probability sampling methods. Participation was self-selected, and the sample is not representative of the broader Kosovo student population. Accordingly, the findings should not be generalized beyond student populations in similar instructional contexts.

MEASURES

All constructs were measured using self-report items on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) adapted from previously validated instruments. Self-report measures were considered appropriate because the focal constructs - particularly writing self-efficacy and

perceived feedback quality - concern students' subjective perceptions and evaluations. All instruments were originally developed in English and administered in English, consistent with the academic writing course context. Items were reviewed by two bilingual content experts familiar with the Kosovo university context to confirm clarity and interpretive equivalence; no substantive modifications were required.

Formative Feedback (FF)

Perceptions of formative feedback were measured using five items adapted from Carless (2006) and Nicol and Macfarlane-Dick (2006). These items assessed students' views of the clarity, specificity, timeliness, and usefulness of the feedback they received on their writing. A sample item is: "The feedback I received clearly helped me understand how to improve my next assignment." Internal consistency for this scale was acceptable ($\alpha = .80$).

Writing Self-Efficacy (WSE)

Writing self-efficacy was measured using five items adapted from Pajares (2007). The items captured students' confidence in carrying out core academic writing tasks, including organizing ideas, using appropriate grammar and sentence structure, revising drafts, and completing writing assignments successfully. Item wording was reviewed to ensure that all items reflected task-specific capability beliefs rather than evaluations of achieved performance, thereby maintaining conceptual separation from the PWC scale. Internal consistency for this scale was high ($\alpha = .95$).

Perceived Writing Competence (PWC)

Perceived writing competence was assessed using three self-evaluation items adapted from Cho and Schunn (2007). The items captured students' judgments about the quality of their recent academic writing and the extent to which they believed it met course expectations. A sample item is: "I am satisfied with the quality of the academic writing I have produced recently." The third PWC item was revised from an earlier version that explicitly referenced grades, reducing conceptual proximity between the predictor and outcome domains. Throughout this manuscript, PWC refers specifi-

Table 1*Demographics (n = 400)*

Variable	Category	F	Percentage (%)
Gender	Male	168	42
	Female	232	58
Age	18-20	183	45.8
	20-22	157	39.3
	22+	60	15.0
Education	Undergraduate	337	84.3
	Postgraduate	63	15.0
University	UPZ	149	37.3
	UP	121	30.3
	AAB	79	19.8
	UBT	51	12.8
Program	Education	111	27.8
	Economics	83	20.8
	Computer Science	71	17.8
	Law	67	16.8
	Philology	68	17.0

Note. UPZ = University of Pristina – Kadri Zeka; UP = University of Prishtina; AAB = AAB College; UBT = University for Business and Technology.

cally to students' self-assessments of their writing competence rather than to grades, instructor ratings, or externally scored writing quality. Internal consistency for this scale was high ($\alpha = .95$). It should be noted that some conceptual proximity between writing self-efficacy and perceived writing competence remains, as both constructs concern students' writing-related self-perceptions; this limitation is acknowledged further in the limitations section.

Model Estimation

Data were analyzed using SPSS and AMOS. Confirmatory factor analysis (CFA) was used to evaluate the measurement properties of the study constructs. Exploratory factor analysis was not performed because all constructs were measured using theoretically specified instruments with established factor structures (Carless, 2006; Pajares, 2007; Cho & Schunn, 2007). The CFA results reported in Table 2 are used to establish whether the observed items adequately represent the three constructs before testing the proposed paths.

Following evaluation of the measurement model, the hypothesized associations were examined using observed-variable path analysis in AMOS based on composite scores. Composite scores were used rather than a full latent-variable structural model in order to simplify model estimation and maintain an adequate indicator-to-sample-size ratio.

It should be noted, however, that this approach does not account for measurement error in the observed variables; accordingly, path coefficients may be attenuated or otherwise biased, and results should be interpreted with this limitation in mind. Indirect associations were assessed using bootstrapping with 5,000 resamples and bias-corrected confidence intervals.

Measurement Model Fit

Model fit indices for the three-factor CFA were as follows: $\chi^2(62) = 184.85$, $\chi^2/df = 2.98$, CFI = .953, TLI = .941, SRMR = .039, and RMSEA = .081. The CFI and TLI values were near or above conventional expectations, and the SRMR was within acceptable range, indicating adequate fit on these indices. However, the RMSEA value of .081 is slightly above the conventional .08 guideline, indicating acceptable rather than ideal model fit and suggesting the possibility of minor misspecification. Structural results should therefore be interpreted with corresponding caution; the measurement model provides reasonable, but not strong, support for the proposed construct structure.

Common Method Variance

Given the cross-sectional design and reliance on single-source self-report data, the possibility of common meth-

od variance (CMV) was considered following Podsakoff et al. (2012). It should be acknowledged directly that all three constructs were measured using the same method (self-report questionnaire) and the same source (students), which may inflate observed associations beyond their true magnitude. Several procedural remedies were applied, including voluntary participation, respondent anonymity, and the use of previously validated instruments. In addition, a single-factor CFA model showed substantially poorer fit than the hypothesized three-factor model (see Table 3). This comparison reduces, but does not eliminate, concerns about common method bias; it should be interpreted as a partial diagnostic check, not as a solution to the CMV problem. The mono-method design therefore remains an important limitation, and the findings should be interpreted as perceptual and associative rather than causal.

RESULTS

This section presents the measurement model, descriptive and correlational findings, and the observed-variable path analysis for the sample of 400 EFL university students. The results are organized according to the analytical logic of the study: first, the adequacy and distinctiveness of the measures are assessed; second, the descriptive and correlational patterns are reported; third, the hypothesized direct and indirect associations are tested. Each table is used to support a specific analytical claim rather than to provide descriptive information only.

Measurement Model Evaluation

Before testing the hypothesized associations, the measurement properties of formative feedback, writing self-efficacy, and perceived writing competence were examined. Table 2 is important because it establishes whether the three constructs can be treated as empirically defensible measures in the model. All standardized factor loadings exceeded .70 and were statistically significant, indicating that the items loaded strongly on their intended constructs. Composite reliability values were acceptable to high for formative feedback (CR = .83), writing self-efficacy (CR = .95), and perceived writing competence (CR = .82), exceeding the recommended .70 threshold. AVE values were also above .50, supporting convergent validity. Because MSV values were lower than AVE values for each construct, the table also supports discriminant validity. Thus, Table 2 provides the measurement justification for treating feedback, self-efficacy, and perceived competence as distinct but related constructs in the subsequent path model.

The comparison of measurement models in Table 3 further supports the distinctiveness of the constructs. The three-factor model fit the data substantially better than the one-factor model, $\Delta\chi^2(16) = 2530.63$, $p < .001$. This result is analytically relevant because it reduces the likelihood that

the associations reported below simply reflect a single general self-report factor. However, the RMSEA value of .081 indicates acceptable rather than ideal fit, so the structural findings should still be interpreted with appropriate caution.

Descriptive and Correlational Analysis

Table 4 provides the descriptive and correlational basis for the path model. Participants reported moderate levels of formative feedback ($M = 3.23$, $SD = 0.89$) and perceived writing competence ($M = 3.48$, $SD = 0.91$), while writing self-efficacy was slightly lower ($M = 3.02$, $SD = 0.97$). This descriptive pattern suggests that students evaluated feedback experiences and writing competence moderately positively, but reported comparatively less confidence in performing academic writing tasks. This difference is substantively important because it supports the need to examine self-efficacy as a separate construct rather than assuming that perceived competence and writing confidence are the same.

The correlations in Table 4 also support the expected model logic. Formative feedback was positively associated with writing self-efficacy ($r = .53$, $p < .01$) and perceived writing competence ($r = .60$, $p < .01$), while writing self-efficacy was positively associated with perceived writing competence ($r = .58$, $p < .01$). These moderate positive associations indicate that the three constructs are related strongly enough to justify path testing, but not so strongly as to suggest redundancy. Demographic variables showed only weak associations with the main constructs; therefore, they were not included in the theoretically specified path model.

Path Analysis and Indirect Association

Table 5 is the central table for answering the research questions. For RQ1, formative feedback had a positive direct association with perceived writing competence ($\beta = 0.30$, 95% CI [0.23, 0.38], $p < .001$). This means that students who perceived feedback as clearer, more specific, timely, and useful tended to evaluate their own writing competence more positively, even after writing self-efficacy was included in the model.

For RQ2, writing self-efficacy was positively associated with perceived writing competence ($\beta = 0.37$, 95% CI [0.27, 0.47], $p < .001$). Substantively, students who felt more capable of organizing ideas, revising drafts, and completing academic writing tasks also reported stronger evaluations of their writing competence. This result supports the theoretical distinction between confidence in performing writing tasks and competence self-evaluation while showing that the two are meaningfully related.

For RQ3, formative feedback was positively associated with writing self-efficacy ($\beta = 0.39$, 95% CI [0.32, 0.46], $p < .001$), and the indirect association from formative feedback to perceived writing competence through writing self-efficacy was

Table 2
Confirmatory Factor Analysis Results and Measurement Properties

Construct / Item	Std. Load	t-value	CR	AVE	MSV
Formative Feedback (FF)			0.83	0.70	0.35
1. The feedback I receive on my writing is provided in a timely manner.	0.81	9.26**			
2. The feedback clearly identifies the strengths and weaknesses in my writing.	0.87	9.21**			
3. The feedback I receive is specific and easy to understand.	0.86	8.30**			
4. The feedback provides me with concrete suggestions on how to improve my next assignment.	0.86	14.02**			
5. Overall, the feedback I receive helps me become a better writer.	0.79	Fixed			
Writing Self-Efficacy (WSE)			0.95	0.64	0.35
1. I am confident in my ability to organize my ideas clearly in a written assignment.	0.79	9.50**			
2. I am confident I can use correct grammar and sentence structure in my academic writing.	0.86	7.70**			
3. I am confident in my ability to revise and improve my drafts effectively.	0.81	9.25**			
4. I can successfully complete the writing assignments required in my courses.	0.76	7.66**			
5. I believe I can write a well-structured essay that meets academic standards.	0.80	Fixed			
Perceived Writing Competence (PWC)			0.82	0.61	0.20
1. I am satisfied with the quality of the academic writing I have produced recently.	0.71	13.35**			
2. I am confident that my writing skills meet the expectations of my instructors.	0.83	14.05**			
3. Based on self-assessed progress, my writing competence has developed over the past semester.	0.79	Fixed			

Note. **p < .01. CR = composite reliability; AVE = average variance extracted; MSV = maximum shared variance. The third PWC item was revised to remove reference to instructor grades, reducing conceptual overlap between the predictor and outcome domains.

Table 3
Comparison of Measurement Models: Three-Factor vs. One-Factor

Model	chi-sq	df	chi-sq/df	CFI	TLI	SRMR	RMSEA
Three-factor model	184.85	62	2.98	.953	.941	.039	.081
One-factor model	2715.48	78	34.81	.000	.000	.438	.334

Note. FF = Formative Feedback; WSE = Writing Self-Efficacy; PWC = Perceived Writing Competence. The three-factor model represents the hypothesized measurement structure; the one-factor model constrains all indicators to a single latent factor. $\Delta\chi^2(16) = 2530.63, p < .001$.

Table 4
Descriptive Statistics and Correlation Matrix

Variable	M	SD	FF	WSE	PWC	Gender	Age	Edu.	Univ.
FF	3.23	0.89	1						
WSE	3.02	0.97	.53**	1					
PWC	3.48	0.91	.60**	.58**	1				
Gender	-	-	.06	.08	.02	1			
Age	-	-	-.10	-.04	-.01	-.23**	1		
Education	-	-	.12*	.03	.13*	.11	.16**	1	
University	-	-	-.12*	-.16**	-.17**	-.05	-.10	-.10	1

Note. FF = Formative Feedback; WSE = Writing Self-Efficacy; PWC = Perceived Writing Competence. **p < .01; *p < .05. All correlations should be interpreted as associative rather than causal given the cross-sectional self-report design.

significant ($\beta = 0.15$, 95% CI [0.09, 0.20], $p < .001$). Because the direct association between feedback and perceived competence remained significant, the pattern indicates partial statistical mediation at the associative level. In substantive terms, feedback quality appears to be linked to perceived writing competence in two ways: directly, by helping students evaluate standards and progress, and indirectly, by being associated with stronger writing self-efficacy.

Overall, the results support all three hypotheses and show a coherent associative structure. The evidence does not show that feedback causes self-efficacy or competence perceptions; rather, it shows that the observed pattern is consistent with a social-cognitive model in which writing self-efficacy partly links feedback perceptions with perceived writing competence.

DISCUSSION

Summary of Key Findings in Relation to the Research Questions

This study examined how formative feedback, writing self-efficacy, and perceived writing competence are associated among EFL university students in Kosovo. The findings supported all three hypotheses. Students' perceptions of formative feedback quality were positively associated with writing self-efficacy, indicating that students who perceived feedback as clearer, more specific, timely, and useful also reported stronger confidence in performing academic writing tasks. Writing self-efficacy was positively associated with perceived writing competence, suggesting that students' beliefs in their ability to manage writing tasks were linked to more favorable evaluations of their own writing development. Finally, the indirect association through writing self-efficacy was significant while the direct association also remained significant, indicating partial statistical mediation at the associative level.

The main analytical contribution is that the study brings three constructs that are often examined separately into one model. Rather than treating feedback as only an in-

structional issue or self-efficacy as only an individual motivational variable, the findings show that feedback quality, writing confidence, and competence self-evaluation form a coherent associative structure. This structure is theoretically meaningful because it supports a social-cognitive understanding of EFL writing in which environmental conditions and learner beliefs are jointly related to students' self-evaluations of writing development.

Formative Feedback and Writing Self-Efficacy

The positive association between formative feedback and writing self-efficacy suggests that feedback may matter not only because it gives students information about their writing but also because it is linked to how capable they feel as writers. When feedback clarifies standards, identifies concrete revision possibilities, and helps students see how improvement can occur, it may operate as a source of self-efficacy. This interpretation is consistent with Bandura's (1997) claim that self-efficacy is shaped through interactions between environmental conditions and personal beliefs, including mastery-related experiences and verbal persuasion.

The finding also aligns with EFL writing research showing that feedback is connected to motivational and self-regulatory dimensions of writing. Cui et al. (2021) found that feedback was associated with writing performance and writing self-efficacy, while Siekmann et al. (2023) showed links between teacher feedback perceptions and affective-motivational variables. The present study extends this line of work to Kosovo, where empirical evidence on formative feedback and academic writing remains limited. In this context, the finding is important because feedback may not always be experienced as developmental or dialogic; therefore, the quality of feedback may be particularly relevant for whether students feel capable of improving.

Writing Self-Efficacy and Perceived Writing Competence

The positive association between writing self-efficacy and perceived writing competence indicates that students who feel more capable of performing writing tasks also tend to evaluate their writing development more favorably. This

Table 5

Observed-Variable Path Analysis Results with Bootstrapped Confidence Intervals

Hypothesized Path	Std. Estimate	Lower 95% CI	Upper 95% CI	p
Formative Feedback → Writing Self-Efficacy	0.39	0.32	0.46	<.001
Writing Self-Efficacy → Perceived Writing Competence	0.37	0.27	0.47	<.001
Formative Feedback → Perceived Writing Competence (direct)	0.30	0.23	0.38	<.001
FF → WSE → Perceived Writing Competence (indirect)	0.15	0.09	0.20	<.001

Note. FF = Formative Feedback; WSE = Writing Self-Efficacy; PWC = Perceived Writing Competence. Bootstrapping based on 5,000 resamples with bias-corrected confidence intervals. All coefficients are standardized.

result supports the theoretical distinction between self-efficacy and perceived competence. Self-efficacy refers to beliefs about capability to perform future or ongoing writing actions, whereas perceived competence refers to students' evaluation of the quality or development of their writing. The relationship between the two constructs is therefore expected, but they are not conceptually identical.

This finding is consistent with previous and recent research showing that writing self-efficacy is connected to engagement, self-regulation, and writing-related outcomes. Tsao (2021) found that EFL learners' writing self-efficacy was related to their engagement with written corrective feedback, while Hwang (2025) showed that writing self-efficacy was part of the relationship between feedback perception and self-regulated writing ability. In the present study, the association suggests that students' confidence in handling writing tasks may influence how they judge their own writing competence. However, because perceived competence was self-reported, the finding should not be interpreted as evidence of objectively higher writing performance.

Intermediary Role of Writing Self-Efficacy

The significant indirect association through writing self-efficacy provides the clearest support for the model. It suggests that formative feedback is associated with perceived writing competence partly through students' confidence in their ability to write, revise, and improve. This finding addresses the central gap identified in the study: the role of self-efficacy as a possible linking mechanism between feedback and competence self-evaluations. The direct path also remained significant, which means that self-efficacy explains part, but not all, of the feedback-competence relationship.

This partial mediation pattern is theoretically meaningful because it indicates that feedback may operate through multiple pathways. On one pathway, feedback may be associated with competence perceptions directly by clarifying standards, identifying weaknesses, and making progress visible. On another pathway, feedback may be associated with competence perceptions indirectly by supporting students' belief that they can use feedback and improve. This interpretation is consistent with feedback research that views feedback as a process involving learner interpretation, motivation, and self-regulation rather than as one-way information transfer (Nicol & Macfarlane-Dick, 2006; Hattie & Timperley, 2007; Vattøy & Gamlem, 2024).

Global Positioning and International Relevance

The findings have relevance beyond Kosovo because they support a model that is consistent with international EFL writing research while also showing why context matters. Similar patterns might be expected in other EFL higher education systems where students depend on teacher feed-

back to understand academic writing standards and where writing in English involves linguistic, cognitive, and affective challenges. Evidence from studies in East Asian and broader EFL settings has already linked feedback, self-efficacy, motivation, and writing engagement (Cui et al., 2021; Lee, 2009; Tsao, 2021). The present study adds to this international literature by showing that the same broad social-cognitive structure is observable in a Balkan EFL context that has received limited empirical attention.

At the same time, the study does not claim that the model functions identically across all educational systems. Feedback practices differ across contexts. In some systems, feedback may be highly teacher-centered and corrective; in others, it may be dialogic, peer-supported, or revision-oriented. Student engagement with feedback may also vary depending on assessment culture, prior schooling, language proficiency, and beliefs about teacher authority. Therefore, the Kosovo findings should be understood as supporting the broader applicability of the model while also pointing to the need for comparative research across regions such as East Asia, the Middle East, Latin America, and Europe.

This global positioning strengthens the contribution of the study. The findings do not merely describe a local pattern; they confirm that an integrated feedback-self-efficacy-competence model can be tested in underrepresented EFL higher education settings. They also identify writing self-efficacy as a construct that may travel across contexts while remaining sensitive to local feedback cultures. Future cross-cultural work can build on this model by examining whether the strength of the feedback-self-efficacy and self-efficacy-competence links changes across different assessment traditions and institutional environments.

Theoretical Implications

Theoretically, the findings support the usefulness of Social Cognitive Theory for explaining relationships among instructional conditions, learner beliefs, and writing-related self-evaluations. Formative feedback can be understood as an environmental influence, writing self-efficacy as a personal capability belief, and perceived writing competence as a self-evaluative outcome. The positive associations among these constructs suggest that students' writing development should not be understood only in terms of teacher feedback or writing skill, but also in terms of how students interpret feedback and judge their own capability.

The study also clarifies the role of writing self-efficacy as an intermediary construct. Rather than functioning only as an independent predictor, writing self-efficacy helps explain why feedback perceptions may be associated with perceived writing competence. This is important because it shows that students' confidence may be one mechanism through which feedback becomes meaningful. However, because the mediation was partial, the findings also suggest

that future models should examine additional mechanisms, such as feedback literacy, self-regulated learning strategies, motivation, and prior writing achievement.

A further theoretical implication concerns the distinction between self-efficacy and perceived competence. The study supports treating these constructs separately because the measurement model indicated adequate discriminant validity and the path model showed that self-efficacy had a distinct association with perceived competence. This distinction is useful for EFL writing research because it separates students' belief that they can perform writing tasks from their evaluation of how well their writing is developing.

Practical and Curriculum Implications

The practical implications should be understood in relation to the study's findings rather than as general advice about feedback. Because formative feedback was associated with writing self-efficacy and perceived competence, writing instruction should emphasize feedback that students can interpret and use for revision. Feedback is likely to be most valuable when it clarifies expectations, identifies specific areas for improvement, and gives students a concrete path for action. This does not mean that all feedback must be lengthy; rather, it should make improvement possible and visible.

The findings also suggest that writing courses should create opportunities for students to apply feedback. Draft-based assignments, revision cycles, peer discussion, and reflection tasks can help students transform comments into mastery experiences. When students use feedback and observe improvement, they may be more likely to develop stronger writing self-efficacy and more positive competence perceptions. This implication is relevant internationally because many EFL writing programs face the challenge of moving from correction-focused feedback toward feedback that supports learner agency.

At the curriculum level, the study supports professional development focused on formative assessment and feedback literacy. Instructors may benefit from training on how to design feedback that is not only corrective but also developmental, motivational, and usable. Institutions can also support feedback practices by embedding revision opportunities into writing curricula and by aligning assessment criteria with feedback comments. These implications apply most directly to EFL higher education contexts where academic writing instruction is present but formative feedback practices are still developing.

Limitations and Future Research

Several limitations define the scope of interpretation. First, the study used a cross-sectional design, so causal direction cannot be established. Although the model is theoretically

ordered from feedback to self-efficacy and perceived competence, the data do not show whether feedback leads to changes in these variables over time. Future longitudinal or experimental studies are needed.

Second, all constructs were measured through student self-report. This approach is appropriate for studying perceptions and beliefs, but it does not provide objective evidence of writing performance. Future research should include rated writing samples, instructor evaluations, or portfolio-based assessments to examine whether the same pattern applies to actual writing quality.

Third, the use of one method and one source may increase common method variance. Although the measurement model supported the distinctiveness of the constructs, this does not remove the possibility that associations were inflated by the shared self-report format. Future studies should combine student surveys with teacher data and performance measures.

Fourth, the sample was convenience-based and self-selected. Therefore, the findings should not be generalized to all university students in Kosovo or to all EFL learners. They are most relevant to EFL higher education contexts where students are enrolled in academic writing courses and receive formative feedback.

Finally, writing self-efficacy and perceived writing competence are conceptually close because both involve students' writing-related self-perceptions. Although the study treated them as distinct constructs, future research should continue to refine their measurement and examine whether the model remains stable when perceived competence is compared with objective writing outcomes. Future cross-cultural studies should also examine whether the model operates differently across regions with different feedback practices, assessment traditions, and student engagement patterns.

CONCLUSION

This study examined an integrated model linking formative feedback, writing self-efficacy, and perceived writing competence among EFL university students in Kosovo. The findings showed that students who perceived formative feedback as clearer, more specific, timely, and useful also reported stronger writing self-efficacy and more positive evaluations of their writing competence. Writing self-efficacy partly explained the association between feedback and perceived competence, indicating a partial statistical mediation pattern at the associative level.

The study adds to the field by positioning writing self-efficacy as an intermediary construct in the feedback-competence relationship. This contribution is theoretical as well as contextual. Theoretically, the findings extend Social Cog-

nitive Theory within EFL academic writing by showing how an instructional condition may be connected to students' competence self-evaluations through task-specific capability beliefs. Contextually, the study provides evidence from Kosovo, an underrepresented Balkan EFL higher education setting, thereby broadening the empirical base of international writing research.

The findings are most applicable to EFL higher education contexts where academic writing instruction is offered and formative feedback practices are developing or unevenly implemented. They may inform comparative research in other regions by offering a model that can be tested across different feedback cultures, assessment traditions, and institutional settings. However, because the study was cross-sectional and self-reported, the results should not be interpreted as causal evidence or as proof of objective writing improvement. Future longitudinal, experimental, and cross-cultural studies should test whether the same feedback-self-efficacy-competence structure holds across different educational systems and with externally assessed writing outcomes.

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DECLARATION OF COMPETING INTEREST

None declared.

AUTHORS' CONTRIBUTIONS

Enes Ismeti: conceptualization; methodology; formal analysis; writing – original draft; editing.

Ernest Ismeti: Data Analysis; conceptualization; writing – review and editing; supervision.

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